

### **EXAMINER'S AMENDMENT**

[1] An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

[2] Authorization for this examiner's amendment was given in a telephone interview with Mr. Douglas R. Hanscom (Reg. No. 26, 600) on September 22, 2008.

[3] The application has been amended as follows:

[4] **IN CLAIM 24**

Please replace the subject matter of claim 24 with the following:

24. (Currently Amended) A method for signal evaluation of an electronic image sensor in the course of pattern recognition of the image content of a test body including

dividing the image of said test body into a group of  $N \times N$  grid-like windows each of the size on  $n \times n$  pixels;

generating a multiple pixel output signal representing image content in an  $n \times n$  pixel window within an  $N \times N$  window of the image of said test body;

analyzing the image content in one of said  $n \times n$  pixel windows by converting said output signal into at least one invariant characteristic value using at least one calculation specification in the

form of a two-dimensional mathematical spectral transformation method selected from the group comprising a Fourier, Walsh, Hadamard or circular transformation;

defining two dimensional spectra from said image content;

calculating spectral amplitude values from these two-dimensional spectra and linking together said spectral amplitude values;

weighting said characteristic value with at least one indistinct affiliation function, said affiliation function being a functional connection with a value range of said characteristics value and a characteristic;

generating a higher order indistinct affiliation function by conjunctive linking of all of said affiliation functions of said characteristic;

determining one sympathetic value from said higher order affiliation function for each  $n \times n$  pixel window, said sympathetic value defining a degree to which a characteristic in said image is similar to a reference characteristic;

comparing said sympathetic value with a threshold value; ~~and~~

deciding a class affiliation for said signal from said comparison of said sympathetic value and said threshold value; and

wherein converting said output signal into at least one invariant characteristic value includes generating an invariant spectrum, and wherein the invariant property is adjustable by using transformation coefficients.

[5] **IN CLAIM 29**

Please cancel claim 29.

**[6] IN CLAIM 31**

Please make claim 31 dependent on claim 24.

**REASONS FOR ALLOWANCE**

[7] The following is an examiner's statement of reasons for allowance: The instant invention is related to pattern recognition in the invariant space.

[8] Prior art was found for and applied in the previous office action. Applicant uniquely claimed a distinct feature in the instant invention, which are not found in the prior art, either singularly or in combination. The feature being, invariance property adjustable by transform coefficients. This feature is not found or suggested in the prior art.

[9] Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

[10] Claims 24, 28, 30-37, 40 and 41 are allowed.

***Contact Information***

[11] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Matthew C. Bella whose telephone number is (571) 272-7778, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dated: September 30, 2008

*/Matthew C Bella/  
Supervisory Patent Examiner,  
Art Unit 2624*  

---

Sath V. Perungavoor  
Telephone: (571) 272-7455